29. (New) The method of claim 27, further comprising:

determining power level corrections to be applied to said RF system of said mobile platform from information obtained from said second power level control loop, to thereby permit said mobile platform to make power level adjustments to said RF transmissions independent of said first power control loop.
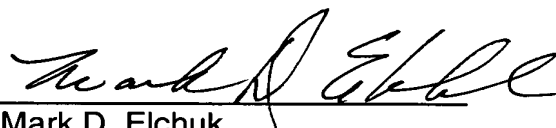
REMARKS

New Claims 19-29 have been added to even further set forth the novel features of the present invention. Minor amendments have also been made to various ones of the previously pending claims to correct any possible instance of a lack of antecedent basis for the terms used.

If the Examiner should have any questions regarding this matter it is requested that the undersigned be contacted at the number below.

Respectfully submitted,

Dated: November __11__, 2002

By: _____
Mark D. Elchuk
Reg. No. 33,686

HARNESS, DICKEY & PIERCE, P.L.C.
P.O. Box 828
Bloomfield Hills, Michigan 48303
(248) 641-1600
MDE/ad

ATTACHMENT FOR SPECIFICATION AMENDMENTS

The following is a marked up version of each replacement paragraph and/or section of the specification in which underlines indicates insertions and brackets indicate deletions.

[0002] In the interval between power control commands, a second control loop is employed by the mobile terminal to maintain the transmit EIRP at the commanded level The second closed control loop is required for stabilizing the transmit EIRP during rapid movement and/or attitude changes of the mobile platform The second closed control loop thus reduces the power control errors caused by the round trip delay between the ground-based central controller and the mobile terminal, which [are] is approximately 0.5 seconds, round trip.

ATTACHMENT FOR CLAIM AMENDMENTS

The following is a marked up version of each amended claim in which underlines indicates insertions and brackets indicate deletions.

6.   (Amended) A method for managing radio frequency (RF) transmissions from an RF system of at least one mobile platform operating within a predetermined coverage region to a space-based transponder orbiting within said coverage region, in a manner to maintain a signal-to-noise ratio (Eb/No) of said RF transmissions within a predetermined range, the method comprising the steps of:

using a first control loop to monitor and adjust a power level of said RF transmissions to maintain same within said predetermined range, said first control loop including the steps of:

receiving said RF transmissions at a central controller;

using said central controller to determine a signal-to-noise ratio of said RF transmissions received by said satellite transponder;

comparing said determined signal-to-noise ratio with predetermined signal-to-noise values representing said predetermined range; and

transmitting commands representing changes in said [signal-to-noise ratio] power level from said central controller to said space-based transponder, and from said space-based transponder to said mobile platform, to thereby command said mobile platform to adjust a power level of its said RF transmissions, in real time, to maintain said signal-to-noise ratio of said RF transmissions within said predetermined range.

7.   (Amended) The method of claim 6, further comprising using a second control loop between said mobile platform and said satellite transponder to monitor

and maintain said signal-to-noise ratio at a previously commanded level, said second control loop including the steps of:

monitoring said signal-to-noise ratio of said RF transmissions between said mobile platform and said satellite transponder; and

in between receipt of said commands from said central controller, adjusting said power level of said RF transmissions to maintain said power level at said previously commanded level determined by said central controller.

8.   (Amended) A method of determining a power spectral density (PSD) of an RF signal from a mobile platform having an RF transmitter/receiver directed at a space-based transponder, said method comprising the steps of:

using a central controller to receive and determine a signal-to-noise ratio of said RF signal transponded from said space-based transponder;

assuming that said signal-to-noise ratio of said RF signal received by said central controller is approximately identical to a signal-to-noise ratio of a RF signal at an output of said space-based transponder;

determining an effective isotropic radiated power (EIRP) value of an RF signal directed at said space-based transponder by said mobile platform as a function of said signal-to-noise ratio of said RF signal received by said central controller, and denoting said EIRP value as a target EIRP;

using said target EIRP and a signal pattern of an antenna of said mobile platform to determine an actual EIRP reaching a GEO arc within which said space-based transponder resides; and

using said actual EIRP reaching said GEO arc to determine said PSD of said RF signal being transmitted by said mobile platform.

10.   (Amended) The system of claim 9, wherein said system comprises an open loop system which compares antenna pointing information generated by an onboard reference system with information contained in a prestored table, and modifies said power level of said signal in accordance with said information contained in said prestored [table] stable.

11.   (Amended) The system of claim 9, further comprising a ground loop controller for measuring a signal quality of said signal when said signal is received from said satellite transponder at a ground station, and for generating a power correction command signal that is transmitted back to the mobile platform via said [satellite] space-based transponder.

16.   (Amended) The system of claim 15, wherein said ground loop controller comprises a closed loop system that compares a signal quality of said signal received at said ground station to a predetermined value and generates said power correction command based on a difference in signal quality between said [received] signal received and said predetermined value.

Claims 19-29 have been added.